

APR

<b>Notice of Allowability</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/934,175	CANELLA, ROBERT L.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Jennifer M. Dolan	2813	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to Amdt of 8/12/05.
2. ☒ The allowed claim(s) is/are 9-18,20-23 and 42-50.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All    b) ☐ Some\*    c) ☐ None    of the:
  1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  5. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

- |  |  |
|--|--|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892)   | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)            |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 6. <input type="checkbox"/> Interview Summary (PTO-413),<br>Paper No./Mail Date _____. |
| 3. <input checked="" type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),<br>Paper No./Mail Date 8/21/01;1/9/02; | 7. <input type="checkbox"/> Examiner's Amendment/Comment                               |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit<br>of Biological Material                               | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance   |
|  | 9. <input type="checkbox"/> Other _____.   |

## DETAILED ACTION

### *Election/Restrictions*

1. Claims 9, 15, and 23 are generic and allowable. Accordingly, the restriction requirement as to the encompassed species is hereby withdrawn and claims 42-50, directed to species of compressible coil contact spikes (42 and 43), clamping elements (44, 45), coil shapes (46, 47) and aperture shapes (48-50) are no longer withdrawn from consideration since all of the claims to this species depend from or otherwise include each of the limitations of an allowed generic claim.

In view of the above noted withdrawal of the restriction requirement as to the linked species, applicants are advised that if any claims depending from or including all the limitations of the allowable generic linking claims be presented in a continuation or divisional application, such claims may be subject to provisional statutory and/or nonstatutory double patenting rejections over the claims of the instant application. Once a restriction requirement is withdrawn, the provisions of 35 U.S.C. 121 are no longer applicable. See *In re Ziegler*, 44 F.2d 1211, 1215, 170 USPQ 129, 131-32 (CCPA 1971). See also MPEP § 804.01.

## EXAMINER'S AMENDMENT

2. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

The application has been amended as follows:

In line 6 of claim 9, "sepentine" has been replaced by --serpentine--.

### *Allowable Subject Matter*

3. Claims 9-18, 20-23, and 42-50 are allowed.

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4. The following is an examiner's statement of reasons for allowance:

The primary reason for allowance is the specific geometry defined in the claims for the spring contact and aperture, wherein the spring contact includes a generally uncoiled serpentine base portion and an adjacent resiliently compressible coil spring contact portion, and wherein the aperture includes a seat portion sized and configured to at least partially contain the contact portion of the spring and a retaining portion connected to the seat portion and receiving the base portion of the spring.

Many of the claimed elements are taught in the prior art, but there is no reasonable teaching or motivation provided for combining prior art elements to arrive at the claimed spring and aperture geometries. For example, US 6,229,320 to Haseyama et al. discloses three distinct substrates (36, 31, 32) having a spring with an upper coil (see figure 21b) that can be received in a seat portion (see figure 11 or figure 13b) in the upper surface of the top substrate, and a lower coil portion that can be formed as an uncoiled serpentine portion received in an aperture in the bottom substrate (see figure 24b). Even if it were considered a trivial matter to modify the structure of Haseyama such that the three substrates are formed as a one-piece substrate, it would not be possible to arrive at the claimed geometry for the aperture, since Haseyama specifically teaches that the spring portions are embedded in resilient layer 31, and hence, teaches away from connecting the aperture in the top substrate with the aperture in the bottom substrate.

Other prior art references (see US 6,341,962 to Sinclair or US 6,390,826 to Affolter et al.) teach apertures having substantially the claimed structure, but the spring portion is provided through the entirety of the aperture as a compressible coil spring. There is no motivation provided in the prior art to modify the spring structure such that only the portion contacting the

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IC lead element is coiled, and the remainder of the spring contact is of an uncoiled serpentine structure.

Since the prior art does not fairly suggest or teach the claimed combination of elements, and since the claimed combination of elements provides advantages in reduced electrical path, reduced inductance, greater reliability of contacting with the IC, and a simplified construction, it is the Examiner's opinion that the invention as claimed would not have been apparent to a person having ordinary skill in the art.

5. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jennifer M. Dolan whose telephone number is (571) 272-1690. The examiner can normally be reached on Monday-Friday 8:30am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Carl W. Whitehead, Jr. can be reached on (571) 272-1702. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Jennifer M. Dolan  
Examiner  
Art Unit 2813

jmd



LAURA M. SCHILLINGER  
PRIMARY EXAMINER